

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/277,575DATE: 04/09/1999
TIME: 15:55:09

Input Set: I277575.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

1 <110> APPLICANT: Newell, Martha K.
 2 <120> TITLE OF INVENTION: METHODS AND PRODUCTS RELATED TO
 3 METABOLIC INTERACTIONS IN DISEASE
 4 <130> FILE REFERENCE: V0139/7028/HK
 5 <140> CURRENT APPLICATION NUMBER: US/09/277,575
 6 <141> CURRENT FILING DATE: 1999-03-26
 7 <150> EARLIER APPLICATION NUMBER: U.S. 60/082,250
 8 <151> EARLIER FILING DATE: 1998-04-17
 9 <150> EARLIER APPLICATION NUMBER: U.S. 60/094,519
 10 <151> EARLIER FILING DATE: 1998-07-29
 11 <150> EARLIER APPLICATION NUMBER: U.S. 60/101,580
 12 <151> EARLIER FILING DATE: 1998-09-24
 13 <160> NUMBER OF SEQ ID NOS: 13
 14 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 15 <210> SEQ ID NO 1
 16 <211> LENGTH: 1491
 17 <212> TYPE: DNA
 18 <213> ORGANISM: Homo Sapiens
 19 <400> SEQUENCE: 1

20	ccaaagaaaa agtgatttgt cattgctta tagactgtaa gaagagaaca tctcagaagt	60
21	ggagtcttac cctgaaatca aaggatttaa agaaaaagtg gaatttttct tcagcaagct	120
22	gtgaaactaa atccacaacc tttggagacc caggaacacc ctccaatctc tgtgtgttt	180
23	gtaaacatca ctggagggtc ttctacgtga gcaattggat tgtcatcagc cctgcctgtt	240
24	ttgcacctgg gaagtgcctt ggtcttactt gggtccaaat tggcactt cactttgac	300
25	cctaagcatc tgaagccatg ggccacacac ggaggcaggg aacatcacca tccaagtgtc	360
26	catacctcaa ttctttcag ctcttggtgc tggctggtct ttctcacttc tgttcaggtg	420
27	ttatccacgt gaccaaggaa gtgaaagaag tggcaacgcgt gtcctgtggt cacaatgtt	480
28	ctgttgaaga gctggcacaa actcgcatct actggcaaaa ggagaagaaaa atggtgctga	540
29	ctatgatgtc tggggacatg aatatatggc ccgagtacaa gaaccggacc atctttgata	600
30	tcaactaataa cctctccatt gtgatcctgg ctctgcgcac atctgacgag ggcacatacg	660
31	agtgtttgt tctgaagtat gaaaaagacg ctttcaagcg ggaacacctg gctgaagtga	720
32	cgttatcagt caaagctgac ttccctacac ctatgtatc tgactttgaa attccaactt	780
33	ctaataattt aaggataatt tgctcaacct ctggaggttt tccagagcct cacctctcct	840
34	ggttggaaaa ttggagaagaa ttaaatgcca tcaacacaac agtttcccaa gatcctgaaa	900
35	ctgagctcta tgctgttagc agcaaactgg atttcaatat gacaaccaac cacagcttca	960
36	tgtgtctcat caagtatggc catttaagag tgaatcagac cttcaactgg aataacaacca	1020
37	agcaagagca tttccctgat aacctgctcc catcctggc cattacctta atctcagtaa	1080
38	atggaatttt tggatgatgc tgcctgacact gctttgc cccaaagatgc agagagagaa	1140
39	ggaggaatga gagattgaga agggaaagtg tacgcccgtt ataacagtgt ccgcagaagc	1200
40	aaggggctga aaagatctga agttagcctc cgtcatctc tctggatac atggatcgtg	1260
41	gggatcatga ggcattcttc ccttaacaaa ttaagctgt tttacccact acctcacctt	1320
42	cttaaaaacc tctttcagat taagctgaac agttacaaga tggctggcat ccctctcctt	1380
43	tctccccata tgcaatttgc ttaatgtaaac ctcttctttt gccatgttcc cattctgc	1440
44	tcttgaatttgc tcttgcagc caattcatta tctattaaac actaatttga g	1491

ENTERED

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/277,575DATE: 04/09/1999
TIME: 15:55:09

Input Set: I277575.RAW

45 <210> SEQ ID NO 2
 46 <211> LENGTH: 288
 47 <212> TYPE: PRT
 48 <213> ORGANISM: Homo Sapiens
 49 <400> SEQUENCE: 2
 Met Gly His Thr Arg Arg Gln Gly Thr Ser Pro Ser Lys Cys Pro Tyr
 1 5 10 15
 Leu Asn Phe Phe Gln Leu Leu Val Leu Ala Gly Leu Ser His Phe Cys
 20 25 30
 Ser Gly Val Ile His Val Thr Lys Glu Val Lys Glu Val Ala Thr Leu
 35 40 45
 Ser Cys Gly His Asn Val Ser Val Glu Glu Leu Ala Gln Thr Arg Ile
 50 55 60
 Tyr Trp Gln Lys Glu Lys Lys Met Val Leu Thr Met Met Ser Gly Asp
 65 70 75 80
 Met Asn Ile Trp Pro Glu Tyr Lys Asn Arg Thr Ile Phe Asp Ile Thr
 85 90 95
 Asn Asn Leu Ser Ile Val Ile Leu Ala Leu Arg Pro Ser Asp Glu Gly
 100 105 110
 Thr Tyr Glu Cys Val Val Leu Lys Tyr Glu Lys Asp Ala Phe Lys Arg
 115 120 125
 Glu His Leu Ala Glu Val Thr Leu Ser Val Lys Ala Asp Phe Pro Thr
 130 135 140
 Pro Ser Ile Ser Asp Phe Glu Ile Pro Thr Ser Asn Ile Arg Arg Ile
 145 150 155 160
 Ile Cys Ser Thr Ser Gly Gly Phe Pro Glu Pro His Leu Ser Trp Leu
 165 170 175
 Glu Asn Gly Glu Glu Leu Asn Ala Ile Asn Thr Thr Val Ser Gln Asp
 180 185 190
 Pro Glu Thr Glu Leu Tyr Ala Val Ser Ser Lys Leu Asp Phe Asn Met
 195 200 205
 Thr Thr Asn His Ser Phe Met Cys Leu Ile Lys Tyr Gly His Leu Arg
 210 215 220
 Val Asn Gln Thr Phe Asn Trp Asn Thr Thr Lys Gln Glu His Phe Pro
 225 230 235 240
 Asp Asn Leu Leu Pro Ser Trp Ala Ile Thr Leu Ile Ser Val Asn Gly
 245 250 255
 Ile Phe Val Ile Cys Cys Leu Thr Tyr Cys Phe Ala Pro Arg Cys Arg
 260 265 270
 Glu Arg Arg Arg Asn Glu Arg Leu Arg Arg Glu Ser Val Arg Pro Val
 275 280 285
 86 <210> SEQ ID NO 3
 87 <211> LENGTH: 1424
 88 <212> TYPE: DNA
 89 <213> ORGANISM: Homo Sapiens
 90 <400> SEQUENCE: 3
 aggagccta ggaggtacgg ggagctcgca aatactcctt ttggtttatt cttaccacct 60
 tgcttctgtg ttccttggga atgctgtgt gcttatgcat ctggctcttt tttggagcta 120
 cagtggacag gcatttgtga cagcactatg ggactgagta acattctctt tgtgtatggcc 180
 ttcctgtct ctggtgctgc tcctctgaag attcaagctt atttcaatga gactgcagac 240

Input Set: I277575.RAW

95 ctgccatgcc aatttgcaaa ctctcaaaac caaagcctga gtgagctagt agtattttgg 300
 96 caggaccagg aaaacttggt tctgaatgag gtatacttag gcaaagagaa atttgacagt 360
 97 gttcattcca agtatatggg ccgcacaagt tttgattcgg acagttggac cctgagactt 420
 98 cacaatctc agatcaagga caagggctt tatcaatgtt tcatccatca caaaaagccc 480
 99 acaggaatga ttccatcca ccagatgaat tctgaactgt cagtgcgtc taacttcagt 540
 100 caacctgaaa tagtaccaat ttctaatata acagaaaatg tgtacataaa ttgacctgc 600
 101 tcatctatac acggttaccc agaacctaag aagatgagtg tttgctaaag aaccaagaat 660
 102 tcaactatcg agtatgtatgg tattatgcag aaatctcaag ataatgtcac agaactgtac 720
 103 gacgtttcca tcaagttgtc tggttcatcc cctgatgtt ctagcaat gaccatctc 780
 104 tgtattctgg aaactgacaa gacgcggctt ttatcttcac ctttctctat agagctttag 840
 105 gaccctcagc ctccccccaga ccacattcct tggattacag ctgtacttcc aacagttatt 900
 106 atatgtgtga tggtttctg tctaattcta tgaaatggaa agaagaagaa gcggcctcgc 960
 107 aactcttata aatgtggAAC caacacaatg gagagggaaag agagtgaaca gaccaagaaa 1020
 108 agagaaaaaaa tccatatacc tgaaagatct gatgaagccc agcgttttt taaaagttcg 1080
 109 aagacatctt catgcgacaa aagtgataca tggttttaat taaagagtaa agcccataca 1140
 110 agtatttcatt ttttctaccc ttcccttgc aagttcctgg gcaaccttt tgatttctc 1200
 111 cagaaggcaa aaagacatta ccatgagtaa taaggggctt ccaggactcc ctctaagtgg 1260
 112 aatagcctcc ctgtaactcc agctctgctc cgtatgccaa gaggagactt taattctt 1320
 113 actgcttctt ttcaacttcag agcacactta tgggccaagc ccagcttaat ggctcatgac 1380
 114 ctggaaataa aatttaggac caataaaaaa aaaaaaaaaa aaaa 1424
 115 <210> SEQ ID NO 4
 116 <211> LENGTH: 323
 117 <212> TYPE: PRT
 118 <213> ORGANISM: Homo Sapiens
 119 <400> SEQUENCE: 4

120 Met Gly Leu Ser Asn Ile Leu Phe Val Met Ala Phe Leu Leu Ser Gly
 121 1 5 10 15
 122 Ala Ala Pro Leu Lys Ile Gln Ala Tyr Phe Asn Glu Thr Ala Asp Leu
 123 20 25 30
 124 Pro Cys Gln Phe Ala Asn Ser Gln Asn Gln Ser Leu Ser Glu Leu Val
 125 35 40 45
 126 Val Phe Trp Gln Asp Gln Glu Asn Leu Val Leu Asn Glu Val Tyr Leu
 127 50 55 60
 128 Gly Lys Glu Lys Phe Asp Ser Val His Ser Lys Tyr Met Gly Arg Thr
 129 65 70 75 80
 130 Ser Phe Asp Ser Asp Ser Trp Thr Leu Arg Leu His Asn Leu Gln Ile
 131 85 90 95
 132 Lys Asp Lys Gly Leu Tyr Gln Cys Ile Ile His His Lys Lys Pro Thr
 133 100 105 110
 134 Gly Met Ile Arg Ile His Gln Met Asn Ser Glu Leu Ser Val Leu Ala
 135 115 120 125
 136 Asn Phe Ser Gln Pro Glu Ile Val Pro Ile Ser Asn Ile Thr Glu Asn
 137 130 135 140
 138 Val Tyr Ile Asn Leu Thr Cys Ser Ser Ile His Gly Tyr Pro Glu Pro
 139 145 150 155 160
 140 Lys Lys Met Ser Val Leu Leu Arg Thr Lys Asn Ser Thr Ile Glu Tyr
 141 165 170 175
 142 Asp Gly Ile Met Gln Lys Ser Gln Asp Asn Val Thr Glu Leu Tyr Asp
 143 180 185 190
 144 Val Ser Ile Ser Leu Ser Val Ser Phe Pro Asp Val Thr Ser Asn Met

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/277,575DATE: 04/09/1999
TIME: 15:55:09

Input Set: I277575.RAW

145	195	200	205	
146	Thr Ile Phe Cys Ile Leu Glu Thr Asp Lys Thr Arg	Leu Leu Ser Ser		
147	210	215	220	
148	Pro Phe Ser Ile Glu Leu Glu Asp Pro Gln Pro Pro Pro	Asp His Ile		
149	225	230	235	240
150	Pro Trp Ile Thr Ala Val Leu Pro Thr Val Ile Ile Cys	Val Met Val		
151	245	250	255	
152	Phe Cys Leu Ile Leu Trp Lys Trp Lys Lys Lys Arg	Pro Arg Asn		
153	260	265	270	
154	Ser Tyr Lys Cys Gly Thr Asn Thr Met Glu Arg Glu	Ser Glu Gln		
155	275	280	285	
156	Thr Lys Lys Arg Glu Lys Ile His Ile Pro Glu Arg	Ser Asp Glu Ala		
157	290	295	300	
158	Gln Arg Val Phe Lys Ser Ser Lys Thr Ser Ser Cys	Asp Lys Ser Asp		
159	305	310	315	320
160	Thr Cys Phe			
161	<210> SEQ ID NO 5			60
162	<211> LENGTH: 924			120
163	<212> TYPE: DNA			180
164	<213> ORGANISM: Homo Sapiens			240
165	<400> SEQUENCE: 5			300
166	atggggggcc tgacagcctc ggacgtacac ccgaccctgg gggtccagct cttctcagct			360
167	ggaatagcgg cgtgcttggc ggacgtgatc accttccgc tggacacggc caaagtccgg			420
168	ctccaggtcc aaggtgaatg cccgacgtcc agtgttatta ggtataaagg tgcctctggg			480
169	acaatcaccg ctgtggtaaa aacagaaggg cgatgaaac tctacagcgg gctgcctgcg			540
170	gggcttcagc ggcaaatcag ctccgcctct ctcaggatcg gcctctacga cacggccag			600
171	gagttcctca ccgcagggaa agaaacagca cctagtttag gaagcaagat tttagctgt			660
172	ctaacgactg gaggagtggc agtattcatt gggcaaccca cagaggtcgt gaaagtca			720
173	cttcaagcac agagccatct ccacgaaatc aaacctcgct acacgggac ttataatgcg			780
174	tacagaataa tagcaacaac cgaaggctt acgggtctt ggaaaggac tactccat			840
175	ctgatgagaa gtgtcatcat caattgtaca gagctagtaa catatgatct aatgaaggag			900
176	gcctttgtga aaaacaacat attagcagat gacgtcccct gccacttggt gtcggcttt			924
177	atcgctggat tttgcgcaac agctatgtcc tccccgggtgg atgtagtaaa aaccagatt			
178	attaattctc caccaggaca gtacaaaagt gtgccaact gtgcaatgaa agtgttcaact			
179	aacgaaggac caacggctt cttcaagggg ttggcacctt cttcttgcg acttggatcc			
180	tggaacgtca ttatgtttgt gtgcttgaa caactgaaac gagaactgtc aaagtcaagg			
181	cagactatgg actgtgccac ataa			
182	<210> SEQ ID NO 6			
183	<211> LENGTH: 307			
184	<212> TYPE: PRT			
185	<213> ORGANISM: Homo Sapiens			
186	<400> SEQUENCE: 6			
187	Met Gly Gly Leu Thr Ala Ser Asp Val His Pro Thr Leu Gly Val Gln			
188	1 5 10 15			
189	Leu Phe Ser Ala Gly Ile Ala Ala Cys Leu Ala Asp Val Ile Thr Phe			
190	20 25 30			
191	Pro Leu Asp Thr Ala Lys Val Arg Leu Gln Val Gln Gly Glu Cys Pro			
192	35 40 45			
193	Thr Ser Ser Val Ile Arg Tyr Lys Gly Val Leu Gly Thr Ile Thr Ala			
194	50 55 60			

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/277,575DATE: 04/09/1999
TIME: 15:55:09

Input Set: I277575.RAW

195 Val Val Lys Thr Glu Gly Arg Met Lys Leu Tyr Ser Gly Leu Pro Ala
 196 65 70 75 80
 197 Gly Leu Gln Arg Gln Ile Ser Ser Ala Ser Leu Arg Ile Gly Leu Tyr
 198 85 90 95
 199 Asp Thr Val Gln Glu Phe Leu Thr Ala Gly Lys Glu Thr Ala Pro Ser
 200 100 105 110
 201 Leu Gly Ser Lys Ile Leu Ala Gly Leu Thr Thr Gly Gly Val Ala Val
 202 115 120 125
 203 Phe Ile Gly Gln Pro Thr Glu Val Val Lys Val Arg Leu Gln Ala Gln
 204 130 135 140
 205 Ser His Leu His Gly Ile Lys Pro Arg Tyr Thr Gly Thr Tyr Asn Ala
 206 145 150 155 160
 207 Tyr Arg Ile Ile Ala Thr Thr Glu Gly Leu Thr Gly Leu Trp Lys Gly
 208 165 170 175
 209 Thr Thr Pro Asn Leu Met Arg Ser Val Ile Ile Asn Cys Thr Glu Leu
 210 180 185 190
 211 Val Thr Tyr Asp Leu Met Lys Glu Ala Phe Val Lys Asn Asn Ile Leu
 212 195 200 205
 213 Ala Asp Asp Val Pro Cys His Leu Val Ser Ala Leu Ile Ala Gly Phe
 214 210 215 220
 215 Cys Ala Thr Ala Met Ser Ser Pro Val Asp Val Val Lys Thr Arg Phe
 216 225 230 235 240
 217 Ile Asn Ser Pro Pro Gly Gln Tyr Lys Ser Val Pro Asn Cys Ala Met
 218 245 250 255
 219 Lys Val Phe Thr Asn Glu Gly Pro Thr Ala Phe Phe Lys Gly Leu Val
 220 260 265 270
 221 Pro Ser Phe Leu Arg Leu Gly Ser Trp Asn Val Ile Met Phe Val Cys
 222 275 280 285
 223 Phe Glu Gln Leu Lys Arg Glu Leu Ser Lys Ser Arg Gln Thr Met Asp
 224 290 295 300
 225 Cys Ala Thr
 226 305
 227 <210> SEQ ID NO 7
 228 <211> LENGTH: 1105
 229 <212> TYPE: DNA
 230 <213> ORGANISM: Homo Sapiens
 231 <400> SEQUENCE: 7
 232 gttccttat ctctgtttgt tgctgattaa aggtccccct gtctccagtt tttctccatc 60
 233 tcctggacg tagcaggaaa tcagcatcat ggttgggttc aaggccacag atgtcccccc 120
 234 tactgccact gtgaagtttc ttggggctgg cacagctgcc tgcacatgcag atctcatcac 180
 235 ctttccctcg gatactgcta aagtccggtt acagatccaa ggagaaagtcc agggggccagt 240
 236 ggcgcgtaca gccagcgccc agtaccgcgg tgtgatgggc accattctga ccatggtgcg 300
 237 tactgaggcc ccccgaagcc tctacaatgg gctgggtgcc ggcctgcagc gccaaatgag 360
 238 ctggcctct gtccgcatcg gcctgtatga ttctgtcaaa cagttctaca ccaagggtc 420
 239 tgagcatgcc agcattggga gcccgcctcct agcaggcagc accacaggtg ccctggctgt 480
 240 ggctgtggcc cagcccacgg atgtggtaaa ggtccgattt caagctcagg cccgggctgg 540
 241 aggtggtcgg agataccaaa gcaccgtcaa tgcctacaag accattgccc gagaggaagg 600
 242 gttccggggc ctctggaaag ggacctctcc caatgttgct cgtaatgcca ttgtcaactg 660
 243 tgctgagctg gtgacctatg acctcatcaa ggatgcctc ctgaaagcca acctctatgac 720
 244 agatgacccctc cttgcccact tcacttctgc ctttggggca ggcttctgca ccactgtcat 780

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/277,575

DATE: 04/09/1999
TIME: 15:55:09

Input Set: **I277575.RAW**

Line ? Error/Warning

Original Text
